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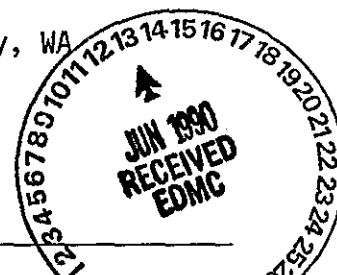
Page 1 of 5

## NRDWSF PERMIT APPLICATION UNIT MANAGERS' MEETING

ATTENDEES: R. C. Bowman (WHC)  
T. M. Hennig (DOE-RL)  
M. Lerchen (Ecology)  
T. M. Michelena (Ecology)  
S. H. Norton (WHC)  
J. W. Olson (WHC)  
S. M. Price (WHC)  
S. D. Stites (DOE-RL)

DATE: January 23, 1990

LOCATION: Lacey, WA



PURPOSE: Deliver the preliminary Notice of Deficiency (NOD) Response Table for the 616 Nonradioactive Dangerous Waste Storage Facility (NRDWSF) Dangerous Waste Permit Application to the Washington State Department of Ecology (Ecology). Discuss the NOD responses that may be contentious.

## MINUTES:

A Unit Managers' meeting was held to provide the preliminary NOD Response Table for the 616 NRDWSF Dangerous Waste Permit Application to Ecology. This NOD Response Table was prepared by WHC and DOE-RL in response to the NOD received from Ecology on November 21, 1990. Those comments that may be contentious (29 out of 70) were discussed. An agenda for the meeting is attached (Attachment 1) and the main topics of discussion are outlined below:

o NOD Comments. Mr. R. C. Bowman led the discussion concerning the 29 NOD comments that may be contentious. A copy of the 616 Nonradioactive Dangerous Waste Storage Facility Preliminary NOD Response Table is attached (Attachment 2). Results of the discussions are detailed below:

## 1. Comment number 1.

Result: Ecology agreed that the citation was adequate as written.

## 2. Comment number 4.

Result: Ecology understood that the fire door was adequately rated in accordance with the applicable fire code.

## 3. Comment number 9.

Result: DOE-RL/WHC agreed to investigate the possibility of imposing additional screening requirements upon liquids found in the loading pad trenches prior to discharge.

## 4. Comment number 10.

Result: DOE-RL/WHC agreed to change the comment response to refer to a legal description of the 616 NRDWSF site.

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5. Comment number 14.

Result: Ecology will require some form of verification sampling. Ecology indicated that the sampling program may be negotiated to involve less than 10% of incoming drums. DOE-RL/WHC agreed to explore options that could support sample verification objectives.

6. Comment number 15.

Result: DOE-RL/WHC agreed to clarify Section 3.1 to better explain the handling of empty drums.

7. Comment number 16.

Result: DOE-RL/WHC agreed to clarify Section 3.1 to better explain the handling of non-regulated waste.

8. Comment number 17.

Result: Ecology will require the permit application to include a list of waste generation sites that are exempt from radiation screening. Ecology proposed that this list could be updated periodically as a minor modification to the Permit.

9. Comment number 18.

Result: Ecology requested that the location of waste designation and the personnel performing waste designation be expanded upon in the text.

10. Comment number 23.

Result: DOE-RL/WHC agreed to include in the text a reference to the land banned certification statement that accompanies appropriate offsite waste shipments.

11. Comment number 28.

Result: Ecology indicated that Hanford still relies far too much on process knowledge and that they would like to see more sampling implemented.

12. Comment number 35.

Result: Ecology indicated that if the french drain or tile field were ever contaminated, they would impose groundwater monitoring requirements on the 616 NRDWSF.

13. Comment number 39.

Result: Ecology stated that they will impose a 36 inch aisle space policy on all container storage facilities. Ecology indicated that they may accept the 27 inch aisle space between the outer row of drums

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13. (Cont'd)

and the wall. DOE-RL/WHC stated a concern on the impact of this decision on the storage capacity of the 616 NRDWSF and requested that Ecology clarify their policy regarding aisle space as no such requirement currently exists in the regulations.

14. Comment number 40.

Result: Ecology indicated that they want to discourage double stacking of drums in single rows. DOE-RL/WHC will detail weight and size limits for containers to be stacked on drums in single rows.

15. Comment number 41.

Result: DOE-RL/WHC agreed to show locations of wire shelving and to maintain a 36 inch aisle space between shelving or cabinets and adjacent drums.

16. Comment number 42.

Result: Ecology stated that the actual facility emergency plan must be included in the permit application.

17. Comment number 43.

Result: Ecology will look into past agreements reached concerning identification of emergency coordinators for the Hanford Site. Ecology will provide further guidance to DOE-RL/WHC upon completion of their research.

18. Comment number 44.

Result: DOE-RL/WHC agreed to clarify the fact that the person on call 24 hours a day is fully qualified to respond to emergencies at the 616 NRDWSF and has the authority to take whatever action is necessary.

19. Comment number 46.

Result: Ecology will look into past agreements reached concerning identification of 'Building Emergency Organization' personnel for the Hanford Site. Ecology will provide further guidance to DOE-RL/WHC upon completion of their research.

20. Comment number 47.

Result: Ecology stated that the actual facility emergency plan must be included in the permit application.

21. Comment number 51.

Result: Ecology requested that the seismic capabilities of the 616 NRDWSF be included in the permit application.

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22. Comment number 52.

Result: After further explanation of management practices at the 616 NRDWSF by DOE-RL/WHC, Ecology indicated that they understood the explanation but maintained their position that employees should be trained to the point that they could make the decision to open the outer building doors without approval from 'supervision'.

23. Comment number 55.

Result: Ecology stated that wipe sampling is not sufficient for concrete. They recommended that the concrete sampling information in the 300 Area Solvent Evaporator Closure Plan be referenced.

24. Comment number 56.

Result: Ecology stated that the background issue will be addressed for the entire Hanford Site. Further guidance will be provided on this issue when available.

25. Comment number 59.

Result: Ecology will review the sampling grid proposed for the loading pads to determine if enough samples have been identified.

26. Comment number 62.

Result: Ecology will determine whether or not a single sample is sufficient for the french drain system based on their review of drawings for that system.

27. Comment number 66.

Result: Ecology stated that closure cost estimates for Hanford Site facilities are required and must be included in the permit application.

28. Comment number 69.

Result: Ecology stated that the actual facility operating procedures must be included in the permit application. They requested to be sent copies of these procedures as soon as possible for their review. Ecology proposed that operating procedures could be updated periodically as a minor modification to the Permit.


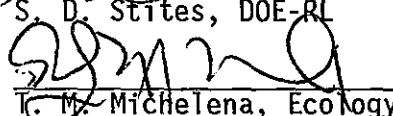
29. Comment number 70.

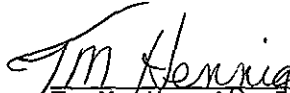
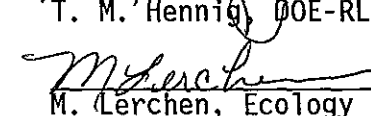
Result: Ecology stated that the actual training course descriptions must be included in the permit application. They requested to be sent copies of these course descriptions as soon as possible for their review. Ecology proposed that training course descriptions could be updated periodically as a minor modification to the Permit.

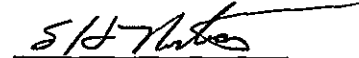
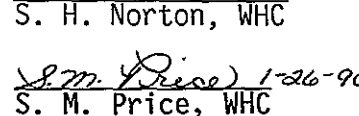
o General Comments. Ecology indicated that the 616 NRDWSF Dangerous Waste Permit is expected to be issued in September.

o Action Items. Key action items assigned during the meeting are summarized as follows:

1. Ecology will provide any additional comments on the 616 NRWSF Preliminary NOD Response Table to DOE-RL/WHC by January 30, 1990.
2. DOE-RL/WHC will provide a final NOD Response Table to Ecology on February 19, 1990.

  
S. D. Stites, DOE-RL  
  
T. M. Michelena, Ecology

<sup>3/1/90</sup>  
T. M. Hennig, DOE-RL  
  
M. Lerchen, Ecology

  
S. H. Norton, WHC  
<sup>1-26-90</sup>  
S. M. Price, WHC

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UNIT MANAGERS MEETING

JANUARY 23, 1990

Lacey, Washington

9:00 am - 10:30 am      Grout Treatment Facility

- Organization
- Liquid Effluent Recycle
- Dry Materials Handling Facility
- Ecology Nov 21, 1989 Letter
- Action Items

10:30am - 12:00 pm      Hanford Vittrification Project

- Review of Action Items
  - o Clean Air Act Permit Application
    - Letter from Ecology
  - o SEPA Checklist
  - o Design/Construction Schedule
  - o Preliminary Design Drawings
- Discussion of NOD Responses
- Action Items

12:00 pm - 1:00 pm      Lunch

1:00 pm - 2:30 pm      616 Nonradioactive Dangerous Waste Storage Facility

- Discussion of NOD Responses
- Action Items

2:30 pm - 4:00 pm      2101-M Pond Closure Plan

- Discussion of NOD Responses
- Comment Clarification
- Action Items

4:00 pm                      Summary/Action Items

- Unit Managers Meetings February 1990

ATTACHMENT 2

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 1 of 19

No.	Comment/Response	Ecology Concurrence
1.	<u>Page 1-1, Section 1.1.</u> Citation reads "(WAC) 173-303-630 (Ecology 1989)."	
	<u>Ecology Requirement:</u> Citation must give most recent version of 173-303. This is currently January 1989. Please change the reference appropriately. <u>Response:</u> The citation simply provides a reference to Chapter 15.0 where the full reference is given. The text will remain unmodified.	
2.	<u>Page 2-6, Section 2.1.2.2, 3rd Paragraph.</u> This paragraph discusses the containment and cleanup procedures for spills into the containment. A reference to Chapter 7.0 (Contingency Plan) should be given.	
	<u>Ecology Requirement:</u> Please modify this section accordingly. <u>Response:</u> The text will be modified to include a reference to Chapter 7.0, Section 7.4.9.	
3.	<u>Page 2-7, Section 2.1.2.2, 2nd Paragraph.</u> The text discusses the location and design of the heating and ventilation system with no referenced design drawings.	
	<u>Ecology Requirement:</u> Please include the design drawings for the entire facility. This should include the ventilation and exhaust systems. This comment also applies to all other facility drawings. <u>Response:</u> Drawings of the facility and heating, ventilation, and air conditioning system will be added.	
4.	<u>Page 2-7, Section 2.1.2.2.1.</u> The text states there is a 2 hour fire-wall and a 1.5 hour fire-rated door.	
	<u>Ecology Requirement:</u> The effectiveness of the fire barriers is only as good as the lowest fire rated component, in this case the doors. Please justify the difference in fire-rating between the doors and the walls. This justification should be sufficient for all similar fire-rating discrepancies stated throughout the text. <u>Response:</u> National Fire Protection Agency (NFPA) 101 "Life Safety Code" specifically requires that a 1.5 hour door be placed in a 2 hour rated wall. In addition, see the Uniform Building Code, NFPA 80 (Fire Doors and Windows), Factory Mutual Approval Guide, Underwriters Laboratories, and the Building Materials Directory. The text will remain unmodified.	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 2 of 19

No.	Comment/Response	Ecology Concurrence
5.	<p><u>Page 2-8, Section 2.1.2.3, 3rd Paragraph.</u> The text states that administrative controls will prevent the release of dangerous wastes into the sink, with the associated discharge to the tile field, without detailing the administrative controls employed to accomplish this task.</p> <p><u>Ecology Requirement:</u> Detail the administrative controls utilized to prevent the discharge of dangerous wastes into the sink.</p> <p><u>Response:</u> A locking valve will be placed on the drain line from the sink and locked closed. Only liquids that are known to be non-regulated will be disposed of to the tile field. Operating procedures will be developed to provide administrative controls over this valve. This procedure will be included in the permit application (see response to comment number 69).</p>	
6.	<p><u>Page 2-9, Section 2.1.2.4.</u> The text outlines the equipment and material stored in the packaging and equipment handling area without a complete inventory of materials, or a reference to Chapter 6.0 (Procedures to Prevent Hazards) or Chapter 7.0 (Contingency Plan) for further discussion.</p> <p><u>Ecology Requirement:</u> Either provide a detailed inventory for this equipment or reference the appropriate section in this application for further discussion.</p> <p><u>Response:</u> Section 7.5.3 will list the minimum equipment to be maintained. A reference will be made in Section 2.1.2.4 and Section 6.3.1.3 to Section 7.5.3.</p>	
7.	<p><u>Page 2-9, Section 2.1.2.6.</u> The text describes the loading and unloading pad with the trench for liquid collection. The text further discusses the removal plug in the trench to allow rainwater to be discharged to a french drain. This is an extremely vulnerable aspect of the design of the 616 Building. It is difficult to ensure that the plug in this trench is always secured and functioning. Should a release occur into the french drain, clean closure would only become possible with a very expensive removal action.</p> <p><u>Ecology Requirement:</u> Outline the administrative controls which will ensure this requirement will not allow a discharge of hazardous constituents into the environment or design and implement a better valve system (as opposed to the plug) for the trench.</p> <p><u>Response:</u> The plug fitting in the trenches of the exterior loading pads will be modified so they can be locked closed. Only facility management personnel (or alternate) will have a key. Material will not be released until it is known to not be regulated either by process</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 3 of 19

No.	Comment/Response	Ecology Concurrence
7.	(Cont'd) knowledge or analytical testing. Note: There are two trenches connected to the french drain. Response is applicable to both. Operating procedures will be developed to provide administrative controls over this valve. This procedure will be included in the permit application (see response to comment number 69).	
8.	<u>Page 2-9, Section 2.1.2.6.</u> The plan discusses the 'french drain' associated with this facility but no drawings are provided.  <u>Ecology Requirement:</u> Please provide detailed drawings of the french drain system for this building. This comment also pertains to the tile field which is depicted only in a general manner. <u>Response:</u> A drawing showing the french drain and tile field will be added.	
9.	<u>Page 2-10, Section 2.1.2.6.</u> The text states that the personnel will monitor the pH prior to discharging the contents of the trench without giving any justification for monitoring only pH.  <u>Ecology Requirement:</u> A pH only monitoring program for liquids in this trench prior to discharge is unacceptable. Due to the diverse nature of material handled in this facility and the consequences of a discharge to the french drain, a more detailed monitoring program is required. Please modify this section accordingly. <u>Response:</u> As stated in Section 2.1.2.6, the trench is kept covered when the pad is not in use. Liquid is released from the trench based on pH alone only after the following:  1) It is known that no waste material has been introduced into the trenches. 2) The liquid is from a rainfall or snowmelt.	
	The only way rain/snow water can become regulated is if the trench or loading pad were contaminated. As stated in Section 2.1.2.6, the pad and trench are triple rinsed after all spills. This makes the pads and trenches nonregulated. Therefore, based on knowledge of the pad, trench, and source of liquid, there is no requirement to sample the liquid in the trench. The pH of the liquid is taken to ensure that Westinghouse Hanford design standards are not exceeded (pH < 4 or >10).	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 4 of 19

No.	Comment/Response	Ecology Concurrence
10.	<u>Page 2-10, Section 2.2.</u> The topographic map outlines the legal boundaries of the facility yet no legal description is given.  <u>Ecology Requirement:</u> Please provide a legal description of this facility. <u>Response:</u> A legal description of the Hanford Site will be provided.	
11.	<u>Page 2-10, Section 2.3.1.</u> Ecology is currently evaluating the necessity of requiring seismic analysis for all facilities on the Hanford Site. Section 2.3.1 will be re-evaluated upon completion of this determination. <u>Response:</u> Until such time that additional direction is provided by Ecology, the text will remain unmodified.	
12.	<u>Page 2-17, Section 2.5.1.</u> The text outlines the facility's abilities for protection of groundwater yet no discussion is made of the french drain or tile field. Without properly addressing these issues, this section is inadequate.  <u>Ecology Requirement:</u> Please modify this section accordingly. <u>Response:</u> The tile field is connected to the drains from the sinks on the 'clean' side of the building. The drain from the Packaging-Sampling Room will be equipped with a lockable valve. Only liquids that are known to be non-regulated will be disposed of to the tile field. The french drain is used to drain both loading pad trenches. The loading pad trenches are equipped with plugs that are kept locked and the only person(s) with a key is facility management. Liquid will be discharged to the french drain only after it is known that it is not regulated (see response to comment number 9). Section 2.5.1 will be amended.	
13.	<u>Page 2-18, Section 2.5.7.</u> The text states that the soil was compacted prior to construction of the 616 facility yet no details of this are given.  <u>Ecology Requirement:</u> Please detail how the soils were compacted prior to construction. <u>Response:</u> The soil compaction procedure will be provided.	
14.	<u>Page 3-1, Section 3.1.</u> The text states that the generating units are responsible for designating the wastes they produce. This is true, however, this does not alleviate the receiving facility (i.e., 616 NRDWSF) from verifying wastes accepted.	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 5 of 19

No.	Comment/Response	Ecology Concurrence
14. (Cont'd)	<p><u>Ecology Requirement:</u> Please modify this section to address the 616 facilities responsibility for waste verification. This must include modifying Section 3.0 to include a waste sampling program for verifying loads received at the facility.</p> <p><u>Response:</u> Washington Administrative Code 173-303-300(3) <i>General Waste Analysis</i> requires that "...The owner or operator of an offsite facility shall confirm, by analysis..." Because the 616 NRDWSF accepts only DOE-RL waste generated onsite (from facilities under the same ID number) it is <u>not</u> an offsite facility. Therefore, verification of the wastes accepted at the 616 NRDWSF is not required.</p>	
15.	<p><u>Page 3-2, Section 3-1.</u> The text states that 616 NRDWSF receives empty waste drums without discussing the sources or handling of these drums.</p> <p><u>Ecology Requirement:</u> Please modify this section or include a discussion elsewhere which better describes the empty drums received and the procedures for processing them.</p> <p><u>Response:</u> Empty drums accepted at the 616 NRDWSF are handled as specified in 49 CFR 173.29(a) "...in the same manner as required when it...contained a greater quantity of hazardous material." Therefore, there is no handling difference between empty and non-empty containers at the 616 NRDWSF.</p>	
16.	<p><u>Page 3-2, Section 3.1.</u> The text states that containerized wastes which cannot be assigned a waste code are accepted at this facility.</p> <p><u>Ecology Requirement:</u> Please detail why these wastes are accepted and how they are handled. This facility should only receive hazardous wastes destined for off-site shipment.</p> <p><u>Response:</u> There is no requirement in the Washington Administrative Code prohibiting a TSD from storing non-regulated waste. The non-regulated wastes stored at the TSD are normally destined for offsite shipment and disposal.</p>	
17.	<p><u>Page 3-5, Section 3.2, 4th Paragraph.</u> The text states "...waste is either tested for radioactivity or exempted from this testing based on waste location and history."</p> <p><u>Ecology Requirement:</u> Please provide a list, including justification, of onsite points of generation which would produce waste exempt from radiation screening.</p> <p><u>Response:</u> Facilities are exempt from radiation screening requirements when no potential for radioactive contamination exists. Due to the changing missions and management practices a current list may be viewed at any time at the facility. The text will remain unmodified.</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 6 of 19

No.	Comment/Response	Ecology Concurrence
18.	<p>Page 3-5, Section 3.2. The first bullet under 'Waste Disposal Analysis' states that the Treatment, Storage, and Disposal (TSD) staff will conduct a waste designation. Is this a verification of the designation provided by the generator or is this the first designation of the waste?</p> <p><u>Ecology Requirement:</u> Please clarify this statement. <u>Response:</u> Because the TSD is an onsite facility, the personnel designated as its technical staff also assist generators obtain proper waste designation. This is the first designation of the waste.</p>	
19.	<p>Page 3-6, Section 3-2, 1st Paragraph. The text discusses the responsibilities of the TSD technical staff. Is this staff from the 616 NRDFS or from another group at the Hanford Site?</p> <p><u>Ecology Requirement:</u> Please clarify 'staff'. <u>Response:</u> The TSD technical staff (assigned to the 616 NRDFS) provides waste designation guidance to various site generators (see response to comment number 18).</p>	
20.	<p>Page 3-6, Section 3-2. The 'Waste Spill or Leak Identification' paragraph should reference Chapter 7.0 (Contingency Plan).</p> <p><u>Ecology Requirement:</u> Please modify the text accordingly. <u>Response:</u> Chapter 7.0, Section 7.4.9 will be referenced in paragraph 3 'Waste Spill or Leak Identification.'</p>	
21.	<p>Page 3-6, Section 3.2.1. This discussion states that "Discarded Chemical Formulations" constitute the bulk of the waste generated onsite. As "Discarded Chemicals" have a very specific meaning in WAC 173-303, this statement does not seem reasonable.</p> <p><u>Ecology Requirement:</u> Please define 'Discarded Chemical Formulations' and provide justification for this statement. <u>Response:</u> Section 3.2.1 will be amended.</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 7 of 19

No.	Comment/Response	Ecology Concurrence
22.	<u>Page 3-7, Table 3-3.</u> Apparently, Biological Testing was inadvertently omitted from this table.  <u>Ecology Requirement:</u> Please modify the table to include biological testing. <u>Response:</u> Biological testing will be added to Table 3-3.	
23.	<u>Page 3-7, Table 3-3.</u> The Total Concentration Leachate procedure testing required for certain Land Disposal Restricted wastes is not on this table.  <u>Ecology Requirement:</u> Please justify this omission or include it as an appropriate designation. <u>Response:</u> The NRDWSF is solely a storage facility. Westinghouse contracts disposal of regulated waste with an approved off-site disposal facility. A letter is sent with each shipment indicating those materials banned from land disposal and the treatment technologies available. The contracted treatment, storage, and/or disposal facility is responsible for determining which of the listed treatment methods it will use. A note is included explaining that if an immobilization technology is used, TCLP testing of the immobilized material must be performed. The contracted disposal facility performs the TCLP testing.	
24.	<u>Page 3-11, Section 3.2.3.</u> This section describes sampling methods for waste designation. Is this done at the 616 NRDWSF or at the point of generation?  <u>Ecology Requirement:</u> Please clarify this point. <u>Response:</u> The sampling is done at the point of generation; this section will be amended.	
25.	<u>Page 3-11, Section 3.2.3, 2nd Paragraph.</u> This paragraph discusses sampling material which has phase separated by using a COLIWASA for obtaining a composite sample.  <u>Ecology Requirement:</u> Waste which has phase separated must be sampled and designated for each phase in the container. Please modify this sampling procedure to clarify this issue. <u>Response:</u> Section 3.2.3 will be amended to "sample analysis are performed on each phase of the waste."	
26.	<u>Page 3-12, Section 3.2.3.</u> The first paragraph states that "...will be handled so that analytical interference...will be precluded." The second paragraph gives one example and no other justification or procedure is given.	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 8 of 19

No.	Comment/Response	Ecology Concurrence
26.	<p>(Cont'd)</p> <p><u>Ecology Requirement:</u> Further explanation of the steps taken to ensure cross contamination of samples and sampling equipment does not occur is required.</p> <p><u>Response:</u> The text will be modified to clarify the steps taken to ensure cross contamination does not occur.</p>	
27.	<p><u>Page 3-12, Section 3.2.4.</u> This paragraph discusses the designation procedure to be followed if a continuous waste stream is generated onsite. This procedure would be to give a one-time designation with an annual verification of this designation. Although the annual verification may be acceptable (depending on the waste stream) more than the initial stream characterization would be required to ensure that the stream is consistent.</p> <p><u>Ecology Requirement:</u> Please modify this discussion to recognize a more intensive waste stream analysis required for an initial designation of a continuously generated waste stream.</p> <p><u>Response:</u> The text will be modified to further discuss initial analysis requirements.</p>	
28.	<p><u>Page 3-12, Section 3.2.5, 3rd Paragraph.</u> This paragraph discusses designation based upon process knowledge. There is far to much reliance on process knowledge for waste stream characterization and designation on the Hanford Site. The Hanford Site staff should consider undertaking a site wide re-evaluation of the use of process knowledge to designate waste streams.</p> <p><u>Response:</u> Waste is designated using process knowledge [WAC-173-303-300(2)] only when the generator can certify what the waste is and has data available on that material. In all other cases the waste is analyzed as required in WAC-173-303. Westinghouse Hanford processes over 2,000 waste sample analyses per year. Process knowledge is used only when applicable and appropriate.</p>	
29.	<p><u>Page 3-15, Section 3.2.5, 3rd Paragraph.</u> This paragraph states "[w]aste shipments are not analytically verified..." This is not acceptable.</p> <p><u>Ecology Requirement:</u> There must be some type of waste shipment verification (to include analytical verification) of incoming waste streams. This NOD will not mandate a specific frequency of verification but will require a revision of this section to include such sampling for inclusion in the next application submittal for review and approval.</p> <p><u>Response:</u> The statement will be removed (see response to comment number 14).</p>	

THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 9 of 19

No.	Comment/Response	Ecology Concurrence
30.	<u>Page 3-18, Figure 3-6.</u> This figure is barely legible.  <u>Ecology Requirement:</u> Please enlarge this figure so it is more readable. <u>Response:</u> The figure will be enlarged.	
31.	<u>Page 4-4, Section 4.1.1.4.</u> This paragraph outlines the use of 'Aquapon' as a concrete sealant and refers the reader to Appendix 4C for further details. Appendix 4C only has the Material Safety Data Sheet for this product and no performance evaluations.  <u>Ecology Requirement:</u> Please provide further documentation on this product. Of particular importance will be information which details the performance of this material when exposed to the various waste types located in the 616 NRWSF. <u>Response:</u> Performance evaluations will be provided in Appendix 4C.	
32.	<u>Page 4-4, Section 4.1.1.4.</u> The text describes cement crack repair yet there are no details of this procedure.  <u>Ecology Requirement:</u> Please provide a procedure for cement crack repair. <u>Response:</u> A procedure will be provided.	
33.	<u>Page 4-4, Table 4-3.</u> Table 4-3 states the Storage Cell Volume in gallons. This volume is based upon double stacking containers in rows as depicted in Figure 6-3. There should be no double stacking of drums which are in one row as is shown for Row 3 in the acid, combustible, oxidizer, and caustic cells.  <u>Ecology Requirement:</u> Please modify Section 4.1.1.6, Table 4-3, Figure 6-3, and any other section affected by this comment. <u>Response:</u> Table 4-3 will be amended. Containers are stacked in two tiers, tier 2 on tier 1. For the center row, no containers over 30 gallons in size will be placed on tier 2.	
34.	<u>Page 4-5, Section 4.1.1.7.</u> The text describes the procedures for collecting run-on to the facility but no reference is made to Chapter 7.0 (Contingency Plan) where these procedures are spelled out in more detail.  <u>Ecology Requirement:</u> Please include a reference to the appropriate section. <u>Response:</u> A reference will be added to Chapter 7.0, Section 7.4.9.	

THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 10 of 19

No.	Comment/Response	Ecology Concurrence
35.	<p><u>Page 5-1, Section 5.0.</u> This statement is true until the french drain or tile field systems receive dangerous wastes (see comment numbers 7 and 8). Response: The tile field has been removed from potential contamination by addition of the locked drain valve (see the response to comment number 5). The locked valve in the loading pad trenches is a significant barrier to contaminating the french drain (see the response to comment number 7). The text will remain unmodified.</p>	
36.	<p><u>Page 6-1, Section 6.1.1.3.</u> This paragraph seems to say that the facility is occupied from 7:30 to 4:00 daily. This is misleading. Conversations with facility staff have shown that the facility is only occupied when waste is being received, moved, or inspected.</p> <p><u>Ecology Requirement:</u> Please clarify this section. Response: The Hanford Site operates 24 hours a day, 365 days per year. The building can and may be occupied at any time. Generally, the building is occupied on Day Shift (beginning at 0730 and ending at 1600 hours). The facility is locked when vacant. The text will be modified to clarify this.</p>	
37.	<p><u>Page 6-4, Section 6.3.1.1.</u> The text describes the onsite communications system yet no references to locations are given.</p> <p><u>Ecology Requirement:</u> Please include in Figure 6-1 the locations of internal and external communications devices (see comment number 2). Response: All communication devices will be shown in Figure 6-1.</p>	
38.	<p><u>Page 6-5, Section 6.3.1.3.</u> This section outlines the types of available emergency equipment but not the exact inventory.</p> <p><u>Ecology Requirement:</u> Please provide the inventory and locations of all emergency equipment. Response: A reference to Chapter 7.0, Section 7.5.3 will be made.</p>	
39.	<p><u>Page 6-7, Section 6.3.2.</u> The aisle space between the waste containers and the wall should be 3 feet.</p> <p><u>Ecology Requirement:</u> Please amend this section appropriately. Response: As specified in Washington Administrative Code 173-303-340(3), the 616 NRDWSF maintains sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment. The aisle</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 11 of 19

No.	Comment/Response	Ecology Concurrence
39. (Cont'd)	spacings listed meet both the intent and letter of the law. Please identify the source of the requirement for a 3-foot aisle space.	
40.	<u>Page 6-9, Figure 6-3.</u> Please refer to comment number 33. Response: Container storage locations will not change.	
41.	<u>Page 6-11, Section 6.5.1.</u> This paragraph states that water-reactive wastes are stored in waterproof cabinets in the flammable liquid storage cells. Figure 6-3 does not show these cabinets as part of the storage layout.  <u>Ecology Requirement:</u> Please modify Figure 6-3 accordingly. Similarly Figure 6-3 should show the location of other storage units (such as wall racks). <u>Response:</u> A new figure will be added showing storage location layout in the NRDFS. This figure will show the locations of the floor storage areas and the open wire shelving. The weatherproof cabinets are designed to stand alone and will be placed in the flammable liquid storage cells on an as-needed basis. Hence, location of the cabinets will vary.	
42.	<u>Page 7-1, Section 7.0.</u> Paragraph 2 states this is a "summary emergency plan." This plan should not be a summary; it should be the entire emergency plan.  <u>Ecology Requirement:</u> Please modify accordingly. <u>Response:</u> The Contingency Plan found in the permit application is actually a compilation of specific requirements applicable to the facility that are maintained in several documents which constitute the Hanford Site emergency plan. The text will be modified to clarify this situation.	
43.	<u>Page 7-3, Section 7-2.</u> The emergency coordinator is not identified.  <u>Ecology Requirement:</u> The plan must identify (by name and position) the emergency coordinator for this facility. <u>Response:</u> The Contingency Plan currently identifies the emergency response phone number (811) and the Hanford Single Point of Contact (373-3800). By calling 811 or 373-3800, an individual (the Fire Department Battalion Commander or the Emergency Duty Officer) will be summoned who has the authority to act for the Building Emergency Director. The Fire Department Battalion Commander and the Emergency Duty Officer have the names and phone numbers of the primary and alternate Building Emergency Director's.	

9 0 1 1 3 3 1 1 4 3 5

THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 12 of 19

No.	Comment/Response	Ecology Concurrence
44.	<p>Page 7-3, Section 7.2.1, 2nd Paragraph. The text states that the building emergency director is not on call 24 hours/day. The person who is on call must be familiar with the facilities and emergency procedures for this building.</p> <p><u>Ecology Requirement:</u> Please clarify the text to appropriately explain this.</p> <p><u>Response:</u> Those persons authorized to act for the building emergency director during his absences are provided with sufficient information, training, and access to resources to respond to any emergency situation at the 616 Storage Facility. The Fire Department Battalion Commander and the Emergency Duty Officer have the names and phone numbers of the primary and alternate Building Emergency Director's. The text will remain unmodified.</p>	
45.	<p>Page 7-5, Section 7.2.2. The first bullet identifies the 'Building warden' in the emergency organization. What is a building warden?</p> <p><u>Ecology Requirement:</u> Please clarify this position.</p> <p><u>Response:</u> The building warden is a management individual assigned by the responsible building manager. Further discussion of the building warden's responsibilities is included in Section 7.2.2.1.3. The text will be modified to clarify this position.</p>	
46.	<p>Page 7-5, Section 7.2.2.1. This section briefly explains the 'Building Emergency Organization' without identifying these key personnel.</p> <p><u>Ecology Requirement:</u> Please identify these persons.</p> <p><u>Response:</u> The Contingency Plan currently identifies the emergency response phone number (811) and the Hanford Single Point of Contact (373-3800). By calling 811 or 373-3800, an individual (the Fire Department Battalion Commander or the Emergency Duty Officer) will be summoned who has the authority to act for the Building Emergency Director. The Fire Department Battalion Commander and the Emergency Duty Officer have the names and phone numbers of the primary and alternate Building Emergency Director's.</p>	
47.	<p>Page 7-14, Section 7.3. The text discusses the NRWSF emergency plan. This plan is apparently not included in this document.</p> <p><u>Ecology Requirement:</u> Please include the emergency plan in this document for review and approval.</p>	

9 3 1 1 3 5 1 4 3 5  
THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 13 of 19

No.	Comment/Response	Ecology Concurrence
47.	<p>(Cont'd)</p> <p>Response: The text will be modified to remove any reference to the NRDWSF emergency plan. The contingency plan included in the permit application represents a compilation of all emergency response requirements currently applicable to the 616 NRDWSF.</p>	
48.	<p><u>Page 7-18, Section 7.4.1.3, 1st Bullet.</u> The text references reportable quantities for notifications of releases. The State of Washington Dangerous Waste Regulations do not use reportable quantities for notification and response purposes.</p> <p><u>Ecology Requirement:</u> Please strike any reference to reportable quantities for releases to the environment. Ecology will address this issue on a site-wide basis in the General Hanford Permit. For purposes of this application, Ecology will provide guidance to Energy prior to the next NOD response cycle.</p> <p>Response: Text associated with reportable quantities for notification of releases will be removed. Ecology guidance will be addressed when provided.</p>	
49.	<p><u>Page 7-18, Section 7.4.1.3, 4th Bullet.</u> The Ecology telephone number is the general Ecology reception number. The notification number for the Hanford Site should be (206) 438-7016.</p> <p><u>Ecology Requirement:</u> Please modify this bullet accordingly.</p> <p>Response: The Ecology phone number will be included in the text.</p>	
50.	<p><u>Page 7-20, Section 7.4.2, 5th Bullet.</u> The fifth bullet discusses the possibility of permanent stabilization of spills. If clean closure is the strategy for this facility and Ecology agrees not to insist on a Postclosure Plan for this facility, permanent stabilization is not an option for spill remediation.</p> <p><u>Ecology Requirement:</u> Either strike this language and revise any internal spill response procedures to ensure full removal of any release or submit a Postclosure Plan for addressing permanent stabilization as an option for spill remediation.</p> <p>Response: Text associated with the permanent stabilization of spills will be removed.</p>	
51.	<p><u>Page 7-32, Section 7.4.16.1.</u> The text mentions seismic activity as a potential natural event which could effect 616 NRDWSF operations. There is, however, no discussion in the application as to the facility's design capability of withstanding such an event.</p> <p><u>Ecology Requirement:</u> Please state the size of earthquake which the 616 NRDWSF could withstand without structural damage.</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 14 of 19

No.	Comment/Response	Ecology Concurrence
51.	<p>(Cont'd)</p> <p>Response: There is currently no requirement in WAC 173-303 to address the capacity of the 616 Storage Facility to withstand a seismic event (see the response to comment number 11). The text will remain unmodified.</p>	
52.	<p>Page 7-33, Section 7.4.16.3. The last section on this page discusses the procedures to be implemented in case of an emergency power outage. The third bullet of this procedure states the outside doors will be opened and the inside doors will be closed "[i]f instructed by supervision, ..." The staff should be trained to the point that they could make this determination without approval from 'supervision'.</p> <p><u>Ecology Requirement:</u> Please modify this section accordingly or justify otherwise.</p> <p>Response: The staff may not be fully aware of all conditions (e.g. high winds, fire, etc.) associated with the power outage/ventilation loss. Since the decision to open the outer building doors may be dependent on several factors that could potentially complicate the situation, this decision is better left to the discretion of supervision. The text will remain unmodified.</p>	
53.	<p>Page 7-37, Figure 7-4. This map is not readable.</p> <p><u>Ecology Requirement:</u> Please resubmit this map in a large scale.</p> <p>Response: The map will be changed to improve readability.</p>	
54.	<p>Page 7-44, Section 7.6.5. This paragraph discusses the Hanford Exposure Evaluator. There is, however, no discussion of what this is.</p> <p><u>Ecology Requirement:</u> Please explain in the text of this section what the Hanford Exposure Evaluator is.</p> <p>Response: The text will be modified to further detail the role of the Hanford Exposure Evaluator.</p>	
55.	<p>Page 11-2, Section 11.1.1.1. This section discusses the decontamination of the equipment and concrete in the facility. The text states that decontamination will continue until the rinsate is no longer designated. The determination for decontamination will not be the solution but will be based upon how clean the equipment or concrete is.</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 15 of 19

No.	Comment/Response	Ecology Concurrence
55.	<p>(Cont'd)</p> <p><u>Ecology Requirement:</u> Please revise this section to properly address the decontamination of equipment and concrete. This must include established cleanup levels (to include sample verification) of the material in question.</p> <p><u>Response:</u> Verification wipe sampling will be performed on the concrete and accessible portions of the equipment which will have been in contact with contaminated materials. As with wipe sampling conducted in association with other sampling, detection of constituents of concern will initiate further action. In this case further decontamination.</p>	
56.	<p><u>Page 11-2, Section 11.1.1.1, 2nd Paragraph.</u> The text states that background will be taken by coring the walkway. This is not adequate. Background will need to be at a point outside the potential area of impact. This would ideally be at a point outside of any of the operative (100, 200, etc.) areas.</p> <p><u>Ecology Requirement:</u> Please rewrite this section to include a more appropriate background sampling point. This comment applies to all discussions on background sampling in this application.</p> <p><u>Response:</u> Background is ideally located in uncontaminated material identical to the potentially contaminated material being assessed for concrete. A background sample must be taken in the same pour as the sample to be assessed for contamination (same aggregate and concrete). The walkway is the location in 616 NRDSF appropriate for such sampling, because:</p> <ol style="list-style-type: none"><li>1) No waste handling operations ever occurred there.</li><li>2) The walkway is sealed.</li><li>3) The top portion of the concrete will be removed before analysis. Variability of concrete, due to different sources of cement and aggregate, requires selection of background in the same pour as the concrete being assessed for contamination. In the case of the 616 NRDSF, no other appropriate background sampling location besides the walkway are considered appropriate.</li></ol>	
57.	<p><u>Page 11-8, Section 11.1.4.3.</u> The text describes the process for decontaminating the walls of the facility. There is, however, no discussion of verification sampling.</p> <p><u>Ecology Requirement:</u> Please revise this section to include verification sampling. This comment is also applicable to the discussion in Section 11.1.4.3.1 (Sampling and Decontamination of Concrete Floor).</p>	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 16 of 19

No.	Comment/Response	Ecology Concurrence
57.	(Cont'd) Response: Verification wipe sampling will be incorporated into the text.	
58.	<u>Page 11-11, Section 11.1.4.3.2, 2nd Paragraph.</u> The text discusses decontamination of the north "and/or" east loading pads. Both of these pads must be included in the sampling and decontamination process.  <u>Ecology Requirement:</u> Please revise this section appropriately. Response: The text will be revised accordingly.	
59.	<u>Page 11-11, Section 11.1.4.3.2, 2nd Paragraph.</u> This paragraph also discusses the grid sampling process for the pads and the soils immediately surrounding the pads. There is no clear discussion of how extensive the grid will be in incorporating the adjacent soils.  <u>Ecology Requirement:</u> Please expand this discussion to better clarify the extent of soil sampling (horizontal). The plan must extend several grid sizes off of the cement pad. Response: A defined approach for expanding the grid size off the pad will be incorporated into the text. The grid will be expanded at least one grid size off of the pad, but the number of samples will remain the same.	
60.	<u>Page 11-12, Section 11.1.4.3.2.</u> The first partial paragraph on this page states that soil samples will only be collected on the surface. This is not acceptable.  <u>Ecology Requirement:</u> The soil sampling must occur to a prescribed depth. Please revise this section to include vertical sampling of the soils. Response: A reading of the text reveals that samples will be taken at 1 foot intervals until background levels are achieved for soils; however, the text will be reworded to make this strategy more obvious. Samples will be taken initially at the surface, 1 foot, and 3 feet. Soil removal will commence based on these results. Verification sampling will be included.	
61.	<u>Page 11-12, Section 11.1.4.4.</u> The proposed constituents for analysis in sampling the tile and french drain systems are to be limited to those of documented spills. Due to the potential constituents which may be discharged to these systems, a full Appendix IX analysis must be accomplished.  <u>Ecology Requirement:</u> Please modify this section accordingly.	

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THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 17 of 19

No.	Comment/Response	Ecology Concurrence
61.	(Cont'd) Response: The text will be modified accordingly.	
62.	<u>Page 11-12, Section 11.1.4.4, 2nd Paragraph.</u> The text states that one core sample will be taken in the french drain system. This is inadequate.  <u>Ecology Requirement:</u> Please revise this section to include a more comprehensive sampling and analysis plan for this site. Response: Due to the small size of the french drain and the apparent homogeneity of the contamination source (fluid), one sample is considered adequate.	
63.	<u>Page 11-16, Section 11.1.7.</u> This section discusses potential extensions for the 180 day closure completion time limit. Lack of Congressional funding is given as an example of a reason for requesting an extension. Congressional funding is not an acceptable reason for requesting an extension.  <u>Ecology Requirement:</u> Delete the reference to Congressional funding. Response: The reference will be deleted.	
64.	<u>Page 11-17, Section 11.3.</u> At present there is no Postclosure Plan incorporated in the application. Due to the nature of this facility, Ecology agrees that clean closure is realistic and hence will not require submission of a Postclosure Plan at this time. This position will be evaluated yearly based upon the operating record of the facility. If at any time Ecology determines that releases to the environment have occurred and inappropriate responses have been made, a requirement for preparation and inclusion of a Postclosure Plan into the permit will be made. This annual facility review will be included in the permit once it is issued. Response: Every effort will be made to operate the facility so that it may be clean closed.	
65.	<u>Page 11-17, Section 11.6.</u> The closure cost estimate references the federal regulations. The plan must reference the appropriate state regulation.  <u>Ecology Requirement:</u> Please revise this section to include the proper state citation. Response: The text will be modified accordingly.	

THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 18 of 19

No.	Comment/Response	Ecology Concurrence
66.	<u>Page 12-4, Table 12-1.</u> The table erroneously shows that the Closure Cost estimates are not required. Please refer to comment number 65.  <u>Ecology Requirement:</u> Please modify the table accordingly. <u>Response:</u> WAC 173-303-620(1)(c) exempts federal facilities from the requirements of closure cost estimates as stated in WAC 173-303-620(3)(a).	
67.	<u>Page 12-9, Section 12.4.1.6.1.</u> The last paragraph on this page discusses notification procedures. Ecology does not have reportable quantities as a trigger for notification of releases. We require notification of any release. Please refer to comment number 48.  <u>Ecology Requirement:</u> Please revise this section accordingly. <u>Response:</u> The text will be modified to remove any reference to reportable quantities (also see response to comment number 48).	
68.	<u>Page 12-15, Section 12.4.2.3.3.</u> The closure cost estimate references the federal regulations. The plan must reference the appropriate state regulation. <u>Response:</u> The text will be modified accordingly.	
69.	<u>Appendix 2B-ii.</u> This appendix gives "Sample Procedures". Sample procedures are not adequate. The actual procedures must be given. This appendix will not be reviewed until the actual procedures are given. It should be noted that changes in the procedures (after the permit has been issued) would not require a major modification of the permit in most cases.  <u>Ecology Requirement:</u> Please submit the actual procedures for 616 NRDWSF operations for review and approval. <u>Response:</u> The WAC-173-303-806(a)(viii) requires only "A description of procedures..." Because the 616 NRDWSF is operating, the procedures can change quite frequently depending on conditions and management practices. The sample procedures supplied cover the basic methods of operation of the facility. Current operating procedures can be viewed at any time at the facility.	

THE 616 NONRADIOACTIVE DANGEROUS WASTE  
STORAGE FACILITY PRELIMINARY NOD RESPONSE TABLE

January 22, 1990  
Page 19 of 19

No.	Comment/Response	Ecology Concurrence
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70. Appendix 8A-ii. This appendix gives "Sample Training Course Summaries". Sample summaries are not adequate. The actual course descriptions are required (see comment number 69).

Ecology Requirement: Please submit the actual training course descriptions for review and approval.

Response: The WAC-173-303-806 requires only an outline and descriptions of training. Training course summaries can change quite frequently due to changes in procedures, operating conditions, and management practices. The sample training course summaries which have been supplied are descriptions based on information extracted from actual training course summaries for 616 required training. Current training information can be viewed at any time at the facility.

April 11, 1990

Meeting Minutes Transmittal/Approval  
616 Unit Mangers Meeting: General Topics  
Lacey, Washington

Meeting Held January 23, 1990

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Approval Signatures Found on Page 5.

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PURPOSE: Deliver the preliminary Notice of Deficiency (NOD) Response Table for the 616 Nonradioactive Dangerous Waste Storage Facility Dangerous Waste Permint Application to the Washington State Department of Ecology. Discuss the NOD responses that may be contented.

Meeting Minutes follow and include Attachments:

Attachment #1 Agenda for the meeting

Attachment #2 616 Nonradioactive Dangerous Waste Storage Facility  
Preliminary NOD Response Table

Distribution:

M. R. Adams	L4-92
M. J. Anthony	A6-95
J. D. Bauer	B3-15
L. E. Borneman	H4-57
E. A. Bracken	A6-95
L. C. Brown	H4-51
R. W. Brown	H4-55
R. C. Bowman	H4-57
J. W. Cammann	H4-54
R. M. Carosino	A4-52
G. D. Carpenter	H4-15
C. E. Clark	A6-95
G. T. Dukałow	R2-97
C. DeFigh-Price	H4-52
C. K. Disibio	B3-02
W. T. Dixon	H4-51
D. L. Duncan	EPA
K. R. Fecht	H4-56
C. J. Geier	H4-57
K. L. Hoewing	B3-06
T. M. Hennig	A6-80
R. D. Izatt	A6-95
G. W. Jackson	R2-29
R. J. Landon	H4-50
R. E. Lerch	H4-51
M. Lerchen	Ecology
D. W. Lindsey	R2-82
H. E. McGuire	H4-51
T. M. Michelena	Ecology
S. H. Norton	T3-28

J. W. Olson	R2-82
L. L. Powers	H4-51
S. M. Price	H4-57
F. A. Ruck III	H4-57
D. A. Woodworth	H4-55
S. A. Wiegman	H4-50
EDMC	H4-51

ADMINISTRATIVE RECORD (616 Nonradioactive Dangerous Waste Storage Facility)  
[Care of Susan Wray, WHC (H4-51C)]